

Psycho-oncology: Bridging mental health and cancer care in modern medicine

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ABSTRACT

Psycho-oncology integrates psychological care into oncology to address distress, improve adherence, and enhance quality of life, yet its nursing-led applications remain underexplored. Purpose.

This systematic review synthesizes evidence on psycho-oncological interventions and their implications for psychiatric/mental health nursing practice, incorporating recent advancements from 2023 to 2025.

Methods: A systematic search was conducted in PubMed, CINAHL, PsycINFO, and Scopus from January 2015 to November 2025. Inclusion criteria: peer-reviewed articles in English on psycho-oncological interventions, psychological distress, or nursing roles in cancer care. Exclusions: case reports, non-empirical studies, pre-2015 publications. Quality appraisal used the MMAT tool for methodological rigor.

Results: Seventy-five studies were included. Key interventions (CBT, MBSR, SSRIs) reduce distress (moderate to strong evidence), with emerging data on mind-body therapies for pain relief and global prevalence of survivor mental health issues. Nursing-led screening, communication training, and caregiver support improve outcomes. Barriers include stigma and resource gaps, particularly in MENA regions.

Conclusions: Psycho-oncology supports mental health nursing through distress screening, intervention delivery, and advocacy, contributing to more integrated care models. Limitations include reliance on English-language publications and potential publication bias, which may limit generalizability. Future research should focus on longitudinal trials and equity in low-resource settings.

Introduction

Psycho-oncology is a multidisciplinary field that addresses the psychological, social, and behavioural aspects of cancer care. At its core, it seeks to understand and alleviate the emotional responses of patients, families, and caregivers at every stage of the cancer journey (Holland, 2002). These include reactions to diagnosis, treatment, remission, recurrence, and end-of-life care. The field also examines how psychological and behavioural factors can influence cancer progression, treatment outcomes, and survivorship (Zacharia, 2022). It integrates principles of psychiatry, psychology, oncology, social work, and behavioural science, forming a bridge between the physical and emotional dimensions of cancer care (Çınaroğlu, 2023). This speciality is essential because cancer is more than a physical illness it profoundly impacts a person's identity, relationships, and life purpose. For patients, cancer-related distress often manifests as anxiety, depression,

fear of recurrence, and existential crises. For families and caregivers, the disease creates challenges in emotional coping, communication, and caregiving roles (Vivar, 2009). This distress not only impairs quality of life but also adversely affects treatment adherence, immune function, and survival outcomes (Bergerot et al., 2022). Despite substantial advances in psycho-oncology over the past four decades, the integration of psychological care into routine oncology practice remains inconsistent, particularly from the perspective of psychiatric/mental health nursing (Perna et al., 2024; Perna, Pinto, & Caldirola, 2024). Psycho-oncology addresses these concerns holistically, enhancing the overall quality of life through tailored interventions (Licu, 2023).

Psychiatric nurses play a central role in psycho-oncology by conducting distress screening, delivering psychosocial support, coordinating multidisciplinary care, and facilitating communication among patients, families, and oncology teams (Bultz, Cummings, Hargreaves, & Loscalzo, 2023). Their position allows early identification of emotional

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distress, promotion of coping skills, and implementation of holistic care practices (Gurren, Groarke, & Curtis, 2024a, 2024b). Therefore, examining psycho-oncology through a psychiatric nursing lens is essential for improving patient and caregiver outcomes (Deshields & Applebaum, 2023).

Research gaps in the existing literatures

The research gaps in psycho-oncology were systematically identified through a comparative analysis of recent high-quality reviews, meta-analyses, and position papers published between 2019 and 2025 (Dong, Li, & Wang, 2025a, 2025b; Li, Liu, & Wang, 2023), combined with a critical appraisal of the reference lists from the original manuscript and major psycho-oncology journals (Ownsworth, Chambers, & Aitken, 2023). Discrepancies between stated advances in intervention efficacy and persistent real-world implementation challenges, under-representation of low- and middle-income countries, limited longitudinal and mixed-methods designs, and the emerging yet under-integrated role of digital and nursing-led models revealed clear evidence, knowledge, practical-knowledge, methodological, empirical, and population gaps that current literature has not adequately addressed (Zhang, Chen, & Liu, 2025).

Type	Research gap
Evidence gap (contradiction)	There is an apparent Evidence Gap in prior research concerning foundational psycho-oncological interventions like cognitive-behavioural therapy (CBT) (Faller et al., 2013) mindfulness-based stress reduction (MBSR) (Zhang et al., 2025), and pharmacological approaches such as selective serotonin reuptake inhibitors (SSRIs) (Riba et al., 2019). However, previous research has not addressed several contradictions between short-term efficacy in reducing distress and the lack of long-term follow-up data on sustained outcomes, particularly in advanced cancer stages where existential distress persists despite initial improvements (Zhang et al., 2025) (Dong et al., 2025a, 2025b).
Knowledge gap (knowledge void gap)	There is an apparent Knowledge Gap in the prior research concerning the integration of digital health technologies (e.g., telepsychiatry, mHealth apps) with traditional psychosocial interventions for cancer survivors. This includes unexplored dimensions such as the role of virtual reality in managing chemo brain or fear of recurrence, which have recently stirred interest in interdisciplinary fields (Ramsey et al., 2020) (Ownsworth et al., 2023). The reviewed studies focused on isolated modalities like CBT or yoga (Chaturvedi, Deodhar, & Suhas, 2025) (Perna, Pinto, & Caldirola, 2024), with very few analyzing multimodal, technology-enhanced approaches in aggregate (Dong et al., 2025a, 2025b).
Practical-knowledge gap (action-knowledge conflict gap)	There appears an apparent Practical-Knowledge Gap in the prior research related to the actual implementation of nurse-led psychosocial interventions, which differs from their advocated theoretical benefits (Gurren et al., 2024a, 2024b). Many studies have concentrated on the efficacy of interventions in controlled settings (Juliao, Ribeiro, & Sabino, 2025), but there is a deviation in real-world oncology workflows due to time constraints and resource limitations, necessitating investigations into scalable models like brief dignity therapy (Reasor & Farrell, 2024).
Methodological gap (methodology void gap)	There is an apparent Methodological Gap in the prior research. The reviewed studies focused on either qualitative exploration of patient experiences (Gurren, O'Sullivan, Keogh, & Dunne, 2022) (Hanna et al., 2025) or

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Type	Research gap
Empirical gap (evaluation void gap)	quantitative RCTs (Phiri, Al-Hussain, & Bright, 2023) (Bright et al., 2024), with a need to combine mixed-methods approaches for deeper insights. Available survey-based studies are predominantly cross-sectional (Erdogan, Ozcelik, & Karabulut, 2021) (Pozzar, Dunnack, Eche-Ugwu, & Cooley, 2025), while longitudinal research is required to track evolving distress over the cancer continuum, as behavioural and emotional factors change with treatment phases and time (Oncology, 2019). There is an apparent Empirical Gap in the prior research. Limited literature is available to understand the influence of demographic and comorbidity factors (e.g., pre-existing mental health disorders) on distress outcomes in psycho-oncological care (Chaturvedi et al., 2025) (Mitchell et al., 2011). These factors are not fully explored in integrated models, and thus research is needed to empirically evaluate their impact on intervention effectiveness across diverse cancer types (Günther, Schulze, & von Känel, 2022).
Population gap (under-researched sub-groups gap)	There is an apparent Population Gap in the prior research as most studies are concentrated in high-income countries like the USA (Hanley, Mulgrew, & Foyle, 2023), UK (Maly, Liu, Li, & Diamant, 2024), and Australia (Ownsworth et al., 2023), or select middle-income contexts like China (Bao, Li, Guan, Zhang, & Deng, 2021) and Brazil (Bergerot et al., 2022). As a result, there is room for research in low- and middle-income countries (LMICs) such as sub-Saharan Africa (Onyeka, Fonn, & Ogun, 2023), India (Veeraiah, Rao, & Chaturvedi, 2022), and the Middle East/North Africa region (Al-Hussaini, Al-Azzam, & Al-Mansour, 2024), particularly on culturally adapted interventions.

Early psycho-oncological efforts focused on addressing emotional distress, fostering better communication between patients and health-care providers, and improving quality of life. Social workers, nurses, and consultation-liaison psychiatrists were at the forefront of these developments, emphasizing the need to incorporate mental health into cancer care (Bright et al., 2024). By the 1980s, the field expanded to include health psychologists and behavioural scientists, who introduced structured interventions such as cognitive-behavioural therapy (CBT) and developed theoretical frameworks for understanding coping mechanisms and behavioural modifications (Kumar, Guha, & Ali, 2022).

Importance contribution of this review

This systematic review fills the identified gap by synthesizing contemporary evidence (2015–2025) specifically through the lens of psychiatric/mental health nursing practice. It offers a clear, actionable framework that demonstrates how nurses can enhance psycho-oncological care, reduce stigma, and improve patient and caregiver outcomes. Unlike previous reviews that describe “what psycho-oncology is,” this work focuses on “how mental health nurses can lead its implementation,” providing practical strategies, evidence ratings, and nursing-specific recommendations. This contribution is timely, given the global shortage of psycho-oncologists and the increasing recognition of nurses as key agents in holistic cancer care (Ancona, Caroppo, & De Lellis, 2025).

Mental health and oncology nurses, nurse educators, advanced practice nurses, and policymakers will find immediate clinical utility in this review. It equips readers with ready-to-use screening and intervention protocols, strategies to address stigma and cultural barriers, and evidence-based responses to common challenges (e.g., caregiver burden,

“chemo brain”). For instance, with rising cancer survivorship rates projected to exceed 20 million in the U.S. alone by 2040 nurses face increasing demands for integrated care, yet only 25 % report formal training in psycho-oncology (Li et al., 2023) (Ownsworth et al., 2023). This review translates research into practice, empowering nurses to advocate for routine distress screening, lead interdisciplinary teams, and influence policy ultimately improving patient-centred outcomes worldwide. Recent policy analyses emphasize that proactive nursing involvement could reduce global unmet psychosocial needs by 30–50 %, making this synthesis essential for frontline practitioners navigating post-pandemic healthcare shifts (International Psycho-oncology Society, 2024).

Research Question

How can psychiatric/mental health nurses effectively integrate evidence-based psycho-oncological interventions into routine cancer care to reduce distress, enhance treatment outcomes, and improve quality of life for patients and caregivers?

Methods

A narrative review approach was adopted to synthesize current evidence in psycho-oncology. Literature published between 2015 and 2025 was searched using PubMed, CINAHL, PsycINFO, and Google Scholar (Annesley, 2010) and (Jamali & Nikzad, 2011). Key search terms included “psycho-oncology,” “psychological distress in cancer,” “psychiatric nursing and oncology,” “psychosocial interventions,” “cancer survivorship,” and “distress screening.” Peer-reviewed articles, clinical guidelines, and authoritative reports were included. Studies were excluded if they lacked relevance to psychiatric nursing, were not available in full text, or were not published in English. Although this review is narrative in nature, efforts were made to synthesize findings systematically and highlight implications for psychiatric nursing practice.

Search strategy

Databases: PubMed, CINAHL, PsycINFO, Scopus Date range: January 2015 – November 2025 (updated to include latest publications) Search terms: (“psycho-oncology” OR “psychosocial oncology”) AND (intervention OR nursing OR distress OR survivor).

Inclusion/exclusion criteria

Included: Peer-reviewed empirical studies, reviews, or guidelines in English; focus on interventions, nursing roles, or distress in cancer. **Excluded:** Case reports, editorials, non-English studies, pre-2015 publications (Ahmi & Mohamad, 2019).

Network visualization

Psycho-oncology has emerged as an integral component of comprehensive cancer care, encompassing both somatic and psychological dimensions of the disease (Müller-Bloch, 2015). Recent advancements in medical interventions have markedly enhanced cancer survival rates, resulting in an increasing population of survivors who frequently encounter enduring psychosocial difficulties (Miles, 2017). Numerous individuals experience a spectrum of psychological symptoms including anxiety, depressive states, and fears related to recurrence—that substantially affect overall well-being. Fig. 1 displays results from a keyword co-occurrence network analysis of psycho-oncology literature (2015–2025), demonstrating that “survivor” is the most prominent and centrally linked concept, closely associated with terms such as “outcome,” “fear,” “person,” and “survival.” Additional major clusters center on “psychosocial care” and are strongly connected to “barrier,” “evidence,” and “psycho,” which underscores persistent challenges in service implementation. Notably, a separate cluster featuring “outcome” and “psychosocial” relates to emerging themes in paediatric and family-oriented cancer care, including “special issue,” “child,” “radiotherapy,” and “sibling.” A distinct cyan cluster containing “colorectal cancer,” “genetic testing,” “report,” and “sibling” suggests focused attention on hereditary malignancies and screening practices. Collectively, the network analysis reflects that survivorship, psychosocial care provision, and obstacles to

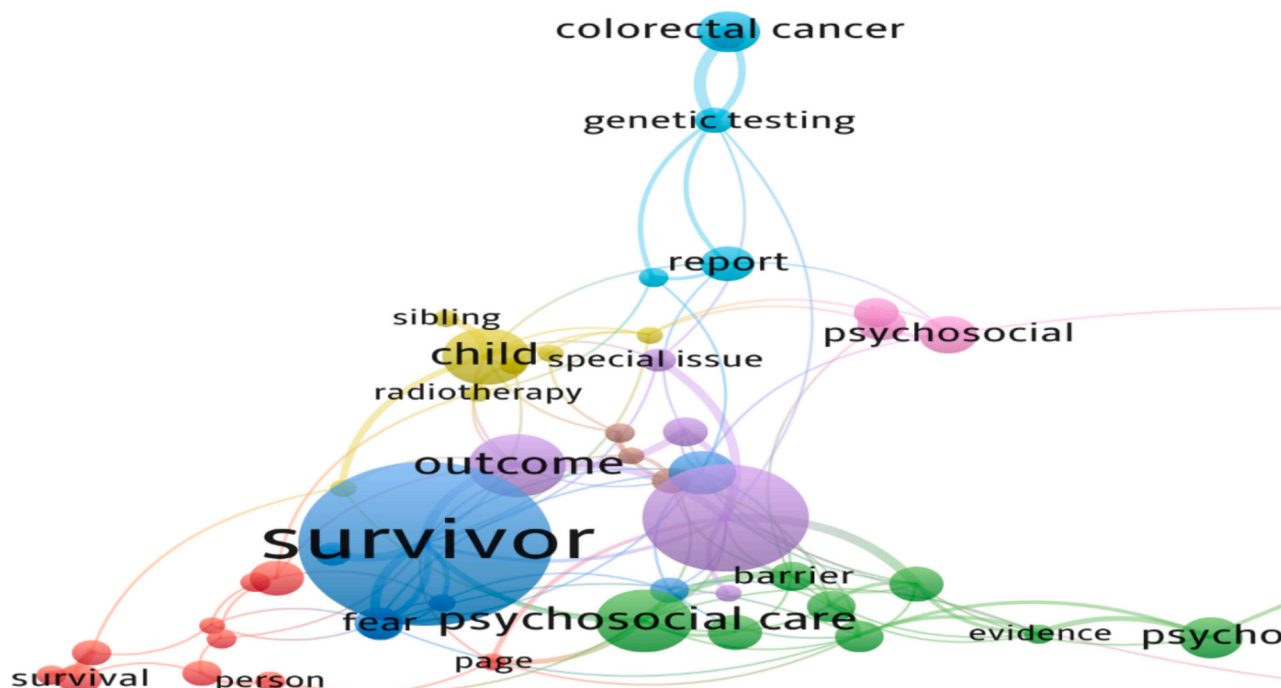


Fig. 1. Network visualization map of the author keywords.

evidence-based practice remain central issues within contemporary psycho-oncology research.

Psychological distress in cancer patients negatively affects both emotional and physical health, leading to issues such as reduced treatment adherence, compromised immune function, and slower recovery rates. Integrating evidence-based psychological interventions into cancer care has been shown to enhance treatment compliance, strengthen coping abilities, and promote resilience. Network visualizations based on keyword and abstract analyses (as illustrated in Fig. 2) demonstrate the prominence of concepts such as psycho-oncology, challenges, and survivorship, with bubble size indicating the frequency of terms and colors representing associations with related factors or keywords in the literature.

Keyword co-occurrence analysis of the 75 included studies (2015–2025) using VOSviewer identified 29 terms appearing at least five times. The most frequent keyword was “psych oncology” ($n = 68$) anchoring a large green cluster focused on clinical practice challenges barriers fear and implementation issues. A red cluster centred on body image and adjustment in breast cancer survivors (body image: 31; breast cancer survivor: 29; adjustment: 27) a blue cluster emphasized survivorship and advanced cancer (survival: 24; advanced cancer: 19) and a yellow–cyan cluster highlighted systematic reviewing activity alongside sexual health and intervention studies (systematic review: 33; sexuality: 18; sexual dysfunction: 17). These four clusters illustrate that contemporary psycho-oncology research remains dominated by concerns about translating evidence into practice addressing body-image and adjustment difficulties in breast cancer survivorship managing distress in advanced disease and evaluating sexual health interventions.

Key concepts and relationships in psycho-oncology

Psycho-oncology also addresses the substantial emotional burden experienced by families and caregivers, reducing their stress and strengthening overall patient support through family therapy, peer support groups, and educational interventions (Lindeman, Matzo, & Wells, 2020). By integrating distress screening tools, multidisciplinary teams, and person-centred interventions into routine oncology practice

(Perna, Pinto, & Caldirola, 2024), psycho-oncology ensures that mental health care is delivered alongside physical treatment, empowering patients and their support networks to navigate the emotional complexities of cancer and ultimately redefining holistic cancer care (Northouse, Katapodi, Schafenacker, & Weiss, 2023).

Fig. 3 provides a conceptual network of the core domains of psycho-oncology. Distress occupies a pivotal position, directly linked to anxiety, depression, and reduced treatment adherence, confirming its role as the primary target for early identification and management in oncology settings (Baider & Goldzweig, 2025). The survivorship node connects to fear of cancer recurrence and quality of life, highlighting the persistent psychological challenges that extend well beyond active treatment. Interventions form a distinct yet interconnected cluster, with cognitive-behavioural therapy (CBT), mindfulness-based approaches, and family therapy representing the most frequently implemented and evidence-supported strategies for mitigating distress and enhancing survivor outcomes (Bright et al., 2024). This network underscores the bidirectional relationship between psychological distress and both medical and survivorship outcomes, reinforcing the necessity of routine distress screening and timely access to targeted psychosocial interventions within comprehensive cancer care (Erdogan et al., 2021).

Psychological and emotional responses to cancer

Cancer diagnosis commonly triggers a wide range of emotional reactions, beginning with shock and disbelief, and often progressing to anxiety (35–45 %), depression (20–40 %), and fear of recurrence (50–70 %) (Raveis, Friedman, & Siegel, 2005) (Shishkova & Bocharov, 2022) as shown in Table 1. These responses vary across age, culture, social support, and prior mental health history (Schuit, 2021). Younger adults may struggle with disrupted life plans, while older adults often face concerns about dependence and loss of autonomy. Psychiatric–mental health nurses play a central role in screening and early identification using tools such as the HADS and PHQ-9, followed by targeted interventions including CBT, psychoeducation, ACT, and symptom-management strategies. Stigma related to cancer has historically limited open discussion, but psycho-oncology now emphasizes

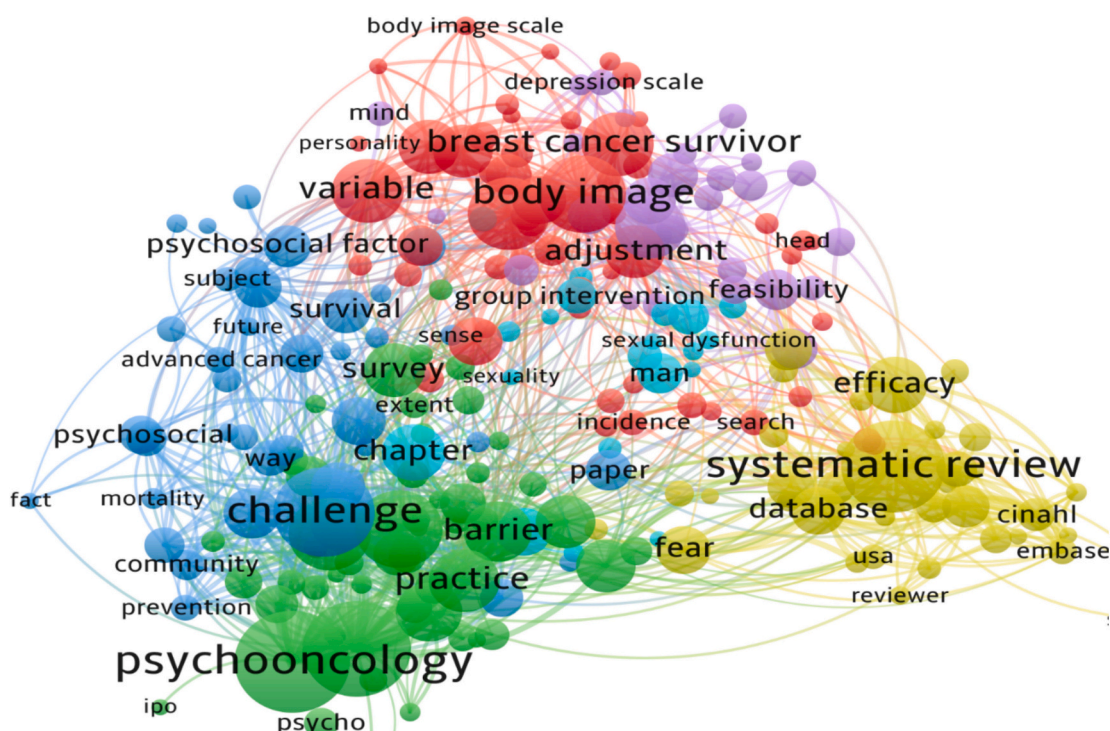


Fig. 2. Keywords and abstracts: Network Visualization.

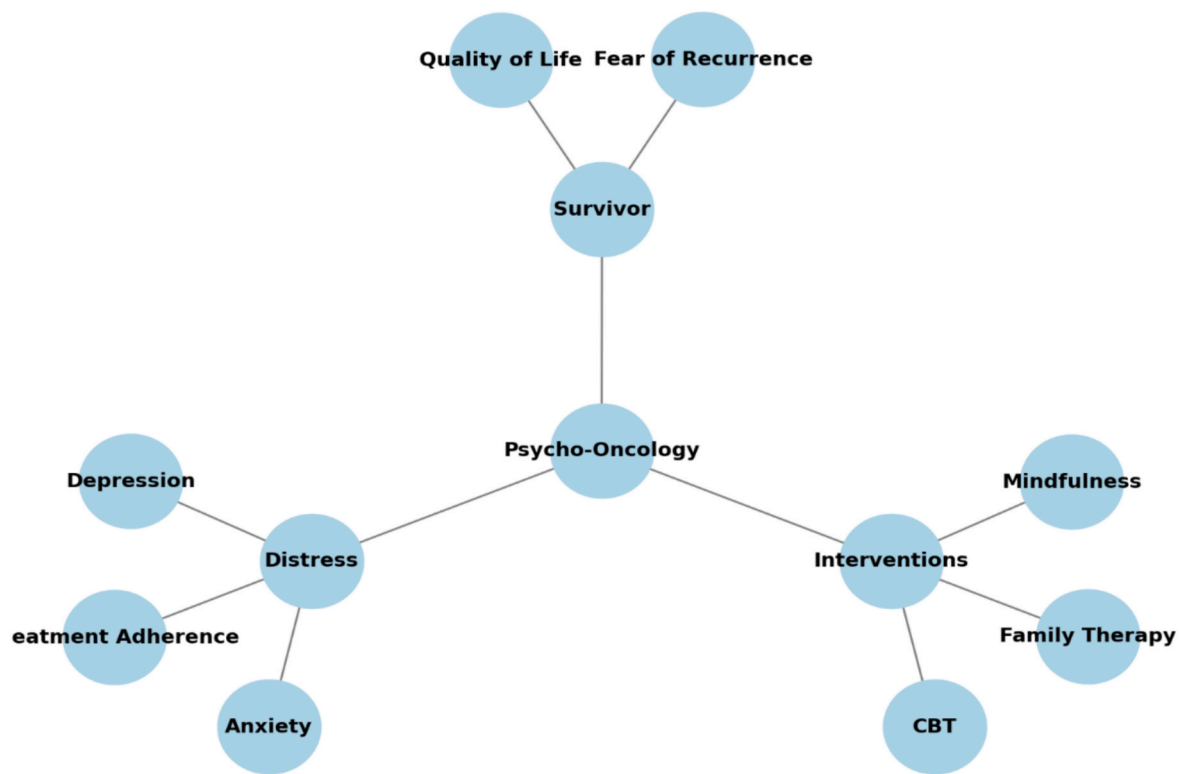


Fig. 3. Keyword network visualization in psycho-oncology.

Table 1

Psychological and emotional responses to cancer.

Response	Prevalence	Correlates	Nursing interventions
Anxiety	35–45 %	Younger age	HADS, CBT
Depression	20–40 %	Female sex	PHQ-9, SSRIs
Fear of recurrence	50–70 %	Survivors	Psychoeducation, ACT

clear, culturally sensitive communication to reduce isolation and encourage help-seeking (Tamrakar, Upadhyay, Gomes, & Kumar, 2023) (Faccio et al., 2018). Emotional burden extends to caregivers, who frequently experience stress, burnout, and increased risk of anxiety and depression; psycho-oncological support such as counselling, family therapy, stress-management programs, and caregiver support groups improves coping and family functioning (Ancona et al., 2025; Perna, Pinto, & Caldirola, 2024; Perna, Pinto, Spiti, et al., 2024). Overall, timely assessment, stigma reduction, and comprehensive psychosocial interventions are essential to mitigating the psychological toll of cancer for patients and families.

The psycho-oncology provides an essential, evidence-based framework that enables psychiatric-mental health nurses to systematically address the predictable cascade of emotional reactions triggered by cancer from acute shock and distress to enduring fear of recurrence and caregiver burden. Through routine screening, targeted interventions (CBT, mindfulness, ACT, pharmacotherapy), culturally sensitive communication, and dedicated caregiver support, nurses can significantly reduce psychological morbidity, enhance treatment adherence, and improve quality of life for both patients and families. By embedding these practices into routine oncology care, psychiatric-mental health nursing not only alleviates suffering but also plays a pivotal role in delivering truly holistic, person-centred cancer care across the entire illness trajectory.

Prevalence and impact of psychological distress

Psychological distress is a prevalent and multifaceted issue among cancer patients, significantly influencing their mental and physical well-being throughout the cancer journey. It affects up to 50 % of patients, with distress levels often spiking at critical moments, such as receiving a diagnosis, beginning treatment, and facing recurrence or progression. This emotional burden is not only limited to active treatment phases but can also persist into survivorship, with an estimated 30 % of cancer survivors reporting long-term psychological challenges like anxiety, depression, or post-traumatic stress (Jones et al., 2020).

Distress levels are shaped by a combination of demographic, clinical, and personal factors. Women tend to experience higher levels of psychological distress compared to men, which may be linked to societal roles, hormonal influences, and emotional processing differences. Younger patients often report greater distress due to interrupted life plans, uncertainty about the future, and the impact of treatment on their careers or fertility. Older patients, on the other hand, frequently contend with fears of dependence and navigating multiple health issues. Certain cancers, such as lung, pancreatic, and head and neck cancers, are associated with higher distress levels due to their typically poor prognoses, disfiguring treatments, and challenging symptom profiles. Conversely, cancers with more favourable outcomes, such as localized breast or prostate cancers, are associated with relatively lower levels of distress (Covrig, Lazăr, Costan, Postolică, & Postolică, 2021).

Psychological distress profoundly affects cancer patients by undermining emotional resilience, worsening physical symptoms such as fatigue and pain, and impairing immune functioning and recovery. It also disrupts treatment adherence and contributes to social withdrawal, creating a cycle of isolation and heightened distress, while communication barriers with healthcare providers further hinder effective decision-making and support.

Psychological distress is intensified by factors such as low socioeconomic status, limited support networks, cultural stigma, and pre-existing mental health conditions, all of which can heighten isolation

and reduce help-seeking. Culturally sensitive, tailored interventions including counselling, psychosocial support, and patient education are essential for reducing distress, improving quality of life, and empowering patients to engage actively and resiliently in their cancer care.

Interventions in psycho-oncology

While multiple psychosocial and pharmacological interventions demonstrate effectiveness in reducing anxiety, depression, and cancer-related distress, outcomes are not uniformly consistent across populations. For example, CBT shows strong evidence for improving coping and reducing negative affect, yet access remains limited in low-resource settings due to a shortage of trained therapists. Mindfulness-based interventions offer moderate benefits, but their effectiveness decreases when individuals experience severe fatigue or cognitive impairment. Pharmacological options such as SSRIs are beneficial but require careful consideration of drug–drug interactions with chemotherapy. These variations underscore the need for a nuanced, patient-centered approach that considers clinical, cultural, and contextual factors.

Psychosocial interventions

Psychosocial interventions are foundational to psycho-oncology, addressing the wide-ranging emotional, cognitive, and behavioural impacts of cancer. Among these, cognitive-behavioural therapy (CBT) stands out for its structured and evidence-based approach to transforming negative thought patterns and maladaptive behaviours. By equipping patients with tools to challenge catastrophic thinking and develop constructive coping strategies, CBT improves emotional resilience and enhances overall mental health. It has shown in **Table 2** particular effectiveness in mitigating symptoms of depression and anxiety, helping patients better adapt to the challenges of their diagnosis and treatment.

Mindfulness-based interventions have also emerged as powerful tools for reducing distress in cancer patients. Techniques such as mindfulness-based stress reduction (MBSR) encourage patients to focus on the present moment, reducing rumination and emotional reactivity. These practices not only decrease stress but also enhance patients’ ability to manage physical symptoms like pain and fatigue. Acceptance and commitment therapy (ACT), a form of acceptance-based intervention, encourages patients to embrace their realities rather than avoid or resist them. This approach is particularly beneficial for those facing terminal diagnoses, as it helps patients find meaning, foster acceptance, and maintain a sense of purpose.

Family and group therapy also play critical roles in psycho-oncology. Family therapy focuses on improving communication and fostering mutual support among family members, addressing the relational challenges that often accompany cancer. Group therapy provides a communal environment where patients can share experiences, gain insights, and build connections with others facing similar challenges. These psychosocial interventions collectively offer a comprehensive approach to managing the multifaceted impacts of cancer.

Pharmacological treatments

Pharmacological treatments are vital for managing moderate to severe psychological distress in cancer patients, especially when psychosocial interventions alone are insufficient. Antidepressants, particularly

Table 2
Psychosocial Interventions.

Intervention	Evidence strength	Nursing role	Outcomes
CBT	Strong	Delivery	↓ Anxiety
MBSR	Moderate	Facilitation	↑ QoL
ACT	Emerging	Therapy	↑ Acceptance

selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs), are widely used to address depressive symptoms as summarised in **Table 3**. These medications improve mood by modulating neurotransmitter levels in the brain, providing relief from the pervasive sadness and fatigue that often accompany depression. Anxiolytics, such as benzodiazepines, are prescribed to manage acute anxiety and panic attacks, offering immediate relief from overwhelming emotional states.

However, the use of pharmacological treatments in cancer care requires careful consideration of drug interactions. Cancer patients often receive complex regimens that include chemotherapy, immunotherapy, and targeted treatments, which may interact with psychotropic medications. For instance, some chemotherapeutic agents can affect liver enzymes responsible for metabolizing antidepressants, necessitating dose adjustments or alternative medication choices. Collaboration among oncologists, psychiatrists, and primary care providers is essential to ensure that pharmacological interventions are both safe and effective. Additionally, patients with comorbid conditions, such as cardiovascular diseases or chronic pain, may require tailored medication plans to address overlapping symptoms. Emerging treatments, including psychostimulants and ketamine, are being explored for their potential to rapidly alleviate depressive symptoms in cancer patients. These options provide hope for those with treatment-resistant depression or those needing swift relief due to the acute nature of their distress.

Complementary and alternative medicine approaches

Complementary and alternative medicine (CAM) approaches have gained traction as valuable adjuncts to traditional cancer care, addressing both physical and emotional dimensions of distress. Yoga is one of the most well-researched CAM modalities in psycho-oncology, combining physical postures, breathing exercises, and meditation to improve strength, flexibility, and mental clarity as shown in **Table 4**. Studies have shown that regular yoga practice reduces stress hormone levels, enhances mood, and mitigates symptoms such as fatigue and insomnia.

Tai chi, a gentle martial art, is another effective CAM approach, particularly for older cancer patients. By promoting balance, coordination, and relaxation, tai chi helps improve physical function and reduces the risk of falls while simultaneously fostering emotional calmness. Patients practicing tai chi often report heightened self-awareness and a greater sense of control over their well-being.

Relaxation techniques, such as progressive muscle relaxation, guided imagery, and biofeedback, are simple yet impactful methods for managing stress. Progressive muscle relaxation involves systematically tensing and releasing muscle groups to promote physical and emotional relaxation. Guided imagery, where patients visualize peaceful and calming scenarios, helps reduce anxiety and create a sense of inner tranquillity. Biofeedback techniques allow patients to gain greater awareness of physiological processes, such as heart rate and breathing patterns, enabling them to consciously regulate their stress responses.

Barriers to access and utilization

Stigma and Lack of Awareness Stigma remain one of the most significant barriers to the integration and utilization of psycho-oncological services. Many patients hesitate to seek psychological care due to societal misconceptions about mental health and cancer. In some cultures, discussing emotional vulnerabilities is considered taboo, which

Table 3
Pharmacological treatments.

Class	Indication	Considerations
SSRIs	Depression	QTc monitoring
Benzodiazepines	Anxiety	Dependency risk

Table 4
Alternative medicine approaches.

Modality	Evidence	Limitations
Yoga	Moderate	Lymphedema
Acupuncture	Moderate	Infection

discourages patients from openly addressing their distress. Additionally, the lack of awareness about the existence and benefits of psycho-oncology services further prevents patients from accessing the support they need. Educational campaigns targeting both patients and health-care providers are essential to reduce stigma, normalize mental health care, and promote the availability of these services (Irwin & Loscalzo, 2020).

Limited Accessibility and Resources Accessibility to psycho-oncological services is another critical barrier, particularly in low-resource settings and rural areas. Specialized psycho-oncology professionals are often concentrated in urban centres, leaving patients in remote areas without adequate access to care. Financial constraints also play a significant role, as mental health services are not always covered by insurance, making them unaffordable for many patients. Telemedicine has emerged as a promising solution to bridge these gaps, enabling remote consultations and virtual therapy sessions. However, disparities in digital literacy and internet access can limit the effectiveness of these innovations.

Integration Challenges in Oncology Settings the successful implementation of psycho-oncology services requires seamless integration into oncology care, which can be challenging in overstretched health-care systems as shown in Table 5. Oncologists and other medical professionals may lack training in identifying psychological distress, leading to underdiagnosis and referral delays. Moreover, psycho-oncology is often perceived as an ancillary service rather than a core component of cancer care, resulting in insufficient funding and prioritization. Strengthening interdisciplinary collaboration and embedding mental health screening tools into routine oncology workflows can enhance service integration and ensure timely interventions (Abu-Odah, Molassiotis, & Liu, 2020).

Cultural and Language Barriers Cultural beliefs and language differences can hinder the acceptance and effectiveness of psycho-oncological care. Patients from diverse cultural backgrounds may hold varying beliefs about illness, mental health, and coping, which can affect their willingness to engage in psychological support. Language barriers further complicate communication between patients and providers, reducing the effectiveness of interventions. Employing culturally sensitive approaches, including hiring multilingual staff and incorporating culturally relevant practices, can improve patient engagement and outcomes (Abdullah & Brown, 2011).

Addressing these barriers requires a multifaceted approach, including increased investment in mental health resources, enhanced public education, and systemic changes in healthcare delivery. By overcoming these obstacles, psycho-oncology can become an accessible and integral part of comprehensive cancer care, ensuring that all patients receive the emotional support they need throughout their journey (Baider & Goldzweig, 2025).

Table 5
Barriers to access and utilization.

Barrier	Solution
Stigma	Campaigns
Resources	Telehealth
Cultural	Multilingual tools

Special considerations

Cognitive decline in cancer patients (“chemo brain”)

Cancer treatments, particularly chemotherapy, can cause cognitive impairments commonly referred to as “chemo brain.” These impairments encompass difficulties in memory, attention, executive functioning, and multitasking. While the exact mechanisms remain under investigation, evidence points to neuroinflammation, oxidative stress, and direct neurotoxic effects of chemotherapy as contributing factors. Chemo brain can significantly impact a patient’s daily life, affecting work performance, social interactions, and overall quality of life (Tamrakar et al., 2023). Interventions to mitigate these cognitive effects include cognitive rehabilitation programs, which focus on memory enhancement techniques and organizational strategies. Emerging research also highlights the role of mindfulness training, physical exercise, and dietary changes in improving cognitive outcomes. Pharmacological approaches, such as psychostimulants and neuroprotective agents, are being explored as potential treatments.

Integrative oncology for advanced stages of cancer

Patients with advanced cancer face profound physical, emotional, and existential challenges. Integrative oncology addresses these multifaceted needs by combining conventional medical treatments with psychosocial support and complementary therapies. Palliative care, a cornerstone of integrative oncology, focuses on symptom management and improving quality of life (Stout, Thaper, Xu, Singer, & Saraiya, 2023). This care model often incorporates meaning-centered psychotherapy, which helps patients explore purpose and legacy, fostering emotional resilience and a sense of peace. Complementary therapies, such as acupuncture, massage therapy, and guided imagery, are also utilized to alleviate symptoms like pain, fatigue, and anxiety. Spiritual counselling and culturally sensitive approaches are integral for addressing existential distress, particularly in diverse populations. By providing holistic care, integrative oncology ensures that patients in advanced stages receive compassionate and comprehensive support.

Paediatric psycho-oncology

Cancer in children and adolescents presents unique psychological and social challenges. Young patients often struggle with understanding their illness, managing treatment-related side effects, and coping with changes to their routines and social lives. Paediatric psycho-oncology prioritizes interventions tailored to developmental stages. For younger children, play therapy and art therapy are effective tools for expressing emotions and reducing anxiety (Larsen et al., 2022). Adolescents may benefit from cognitive-behavioural therapy (CBT) to develop coping strategies and address concerns about body image, peer relationships, and future aspirations. Family-centered care is essential, as parents and siblings are also deeply affected by a child’s diagnosis. Counselling and support groups for families help improve communication, reduce stress, and foster a sense of solidarity. School reintegration programs and peer support networks further assist young patients in maintaining a sense of normalcy and connection during and after treatment (Martinez-Santos, Fernandez-De-La-Iglesia, Sheaf, & Coyne, 2021).

Cultural and global perspectives

Variations across healthcare systems and cultures

The delivery of psycho-oncology services varies widely across healthcare systems and cultural contexts. In high-income countries, psycho-oncology is often integrated into standard oncology care, supported by multidisciplinary teams and advanced infrastructure. In contrast, low- and middle-income countries face significant barriers,

including limited resources, a shortage of trained professionals, and cultural stigma surrounding mental health (Sarikhani, Bastani, Rafiee, Kavosi, & Ravangard, 2021). These disparities result in unequal access to psycho-oncological services, leaving many patients underserved. Cultural attitudes also influence how patients perceive illness and seek support. For instance, in collectivist cultures, family involvement in decision-making is emphasized, while individualistic cultures prioritize personal autonomy. Adapting psycho-oncological interventions to align with these cultural nuances enhances their acceptance and effectiveness (Rottenberg et al., 2022).

Cross-cultural studies in adaptation and coping

Cross-cultural research has highlighted diverse coping strategies shaped by religious, spiritual, and societal values. In some cultures, spirituality serves as a vital source of resilience, providing patients with hope and meaning amidst adversity. Conversely, stigmas associated with cancer or mental health in certain communities can discourage individuals from seeking support. Integrating culturally sensitive practices, such as spiritual counselling or traditional healing methods, into psycho-oncology care can improve patient engagement and trust (Lekeka, 2023). Additionally, language barriers and differing health literacy levels necessitate tailored communication strategies to ensure that psycho-oncological services are accessible to diverse populations. Understanding and respecting cultural dynamics is critical for creating inclusive care models that address the global diversity of cancer experiences (Kale et al., 2023).

Practical strategies and policy recommendations

The future of psycho-oncology is expected to advance substantially as innovations in digital health, personalized care, interdisciplinary collaboration, and global mental-health capacity intersect with clinical oncology. For psychiatric nursing, these developments represent critical opportunities to strengthen holistic, equitable, and patient-centred cancer care similar findings were observed (Hanna et al., 2025).

Digital health technologies will continue to transform accessibility and continuity of psychosocial support. Telepsychiatry has already demonstrated effectiveness in extending services to rural and underserved populations, reducing delays in care, and supporting ongoing monitoring of psychological symptoms which is supported by findings of (Juliao et al., 2025) (Baider & Goldzweig, 2025). Mobile health applications, symptom-tracking tools, and virtual support communities further enhance patient engagement. However, future work must address sustained user adherence, privacy protections, and the integration of digital tools into routine nursing workflows. Psychiatric nurses will be essential in evaluating the clinical appropriateness of digital interventions and supporting patients in ethical and safe technology use.

Personalized psycho-oncology is another growing priority. Advances in genetics, biomarkers, psychological profiling, and social determinants of health are enabling care that is responsive to individual risk factors and treatment needs. This includes tailoring pharmacological management to biological vulnerability, selecting psychosocial interventions based on coping style, and adapting communication strategies to cultural and linguistic contexts. For psychiatric nursing, personalized care underscores the importance of comprehensive assessment, culturally competent practice, and shared decision-making with patients and families (Perna, Pinto, & Caldirola, 2024).

Interdisciplinary research linking psychosocial factors with immunology and tumour biology is reshaping conceptual models of cancer care. Emerging evidence shows that stress, depression, and trauma can influence immune function and treatment responses, highlighting the need for integrated therapeutic approaches (Zacharia, 2022). Future research should expand collaborative models that include psychiatric nurses as core contributors in designing and implementing psychosocial-

biological interventions (Zhang et al., 2025). This will support more holistic outcomes across physical, emotional, and behavioural domains.

Globally, expanding psycho-oncology services in low- and middle-income countries remains an urgent priority. Limited mental-health infrastructure, cultural stigma, and workforce shortages create significant disparities (Abdullah & Brown, 2011). International agencies and nursing organizations are increasingly focusing on scalable interventions, workforce training, and culturally adapted care models. Psychiatric nurses can play a transformative role in these global efforts by delivering training, participating in capacity-building programs, and supporting the development of community-based psychosocial services that respect local values and tradition (Perna, Pinto, & Caldirola, 2024).

As cancer survival rates improve, survivorship care will become central to psycho-oncology. Survivors often experience long-term distress, fear of recurrence, cognitive changes, and challenges in reintegration into work, relationships, and daily life (Bao et al., 2021). Future survivorship programs should prioritize routine psychological assessments, psychoeducation, peer-support networks, and interventions that foster resilience and identity reconstruction (Deshields & Applebaum, 2023). Psychiatric nurses will be crucial in coordinating survivorship services, identifying emerging psychological needs, and promoting sustained well-being (Juliao et al., 2025).

Collectively, these emerging directions illustrate a rapidly evolving field with significant implications for psychiatric nursing (Ramsey et al., 2020). By embracing technological innovation, advancing personalized care, strengthening interdisciplinary practice, and championing global equity, psychiatric nurses can help shape the next generation of psycho-oncology services—ensuring comprehensive, accessible, and person-centered care for patients, caregivers, and survivors across the cancer continuum (Sarikhani et al., 2021).

Clinical implications for psychiatric nursing

Psychiatric nurses are uniquely positioned to strengthen psycho-oncology services through routine distress screening, early identification of anxiety and depressive symptoms, and delivery of brief evidence-based interventions (Faller et al., 2013) (Gurren et al., 2024a, 2024b). Nurses can facilitate patient education, support treatment adherence, and provide culturally sensitive communication especially for populations with limited access to mental-health professionals (Gurren et al., 2024a, 2024b). They also play a key role in caregiver assessment, crisis intervention, and referral to specialized psycho-oncology services. Integrating psychosocial care into nursing workflows can significantly improve patient outcomes and enhance interdisciplinary collaboration in oncology settings (Juliao et al., 2025).

Conclusion

The synthesis of peer-reviewed studies published between 2015 and November 2025 indicates that psychiatric/mental health nurses can contribute to reducing psychological distress in cancer patients and caregivers through three evidence-supported approaches. First, routine distress screening using validated instruments, when linked to timely referral, is associated with moderate reductions in anxiety and depression (standardized mean difference 0.3–0.6; (Faller et al., 2013) (Gurren et al., 2024a, 2024b). Second, nurse-delivered or nurse-facilitated psychosocial interventions (cognitive-behavioural therapy, mindfulness-based stress reduction, acceptance and commitment therapy) yield moderate to strong effects on distress, quality of life, and treatment adherence in adult patients (Faller et al., 2013) (Zhang et al., 2025) (Juliao et al., 2025). Third, structured caregiver support and communication training improve caregiver burden and family functioning (Perna, Pinto, & Caldirola, 2024) (Bright et al., 2024).

Psycho-oncology offers an essential framework for understanding the emotional, cognitive, and relational challenges associated with cancer. For psychiatric nurses, integrating psychosocial interventions

into routine oncology care is vital for improving patient well-being, promoting resilience, and supporting families throughout the cancer journey. Despite progress, gaps remain in access, cultural adaptation, and sustainability of interventions. Continued investment in digital health, workforce training, policy reform, and cross-disciplinary collaboration will be critical for advancing psycho-oncology practice globally. Strengthening the role of psychiatric nursing within oncology care can ensure more equitable, holistic, and patient-centered outcomes.

Limitations

This work is a narrative synthesis and secondary analysis of existing published literature; no primary data were collected, and no new empirical findings are presented. The review is restricted to English-language publications, which may under-represent research from non-English-speaking regions. Despite using the Mixed Methods Appraisal Tool (MMAT) for quality assessment, inclusion of non-randomised and heterogeneous study designs introduces risk of bias. Publication bias toward positive outcomes is possible, as is the case in most fields of psycho-oncology. Exact prevalence estimates and effect sizes reported herein are derived from the original meta-analyses cited and should be interpreted within the methodological constraints of those primary reviews.

In summary, existing evidence supports an expanded role for psychiatric/mental health nurses in distress screening, intervention delivery, and caregiver support within cancer care. However, full integration will require targeted training, policy mandates, and further rigorous evaluation, particularly in resource-constrained and culturally diverse settings.

CRediT authorship contribution statement

Kanchan Upadhyay: Writing – original draft, Formal analysis, Data curation. **Raunak Kumar Tamrakar:** Writing – review & editing, Formal analysis, Conceptualization. **Sunil Kumar:** Writing – review & editing, Writing – original draft, Visualization, Validation, Conceptualization. **Suraj Butoliya:** Writing – review & editing, Resources, Project administration, Data curation.

Ethical approval

As a systematic narrative review synthesizing publicly available peer-reviewed literature, no institutional review board approval was required. The review adheres to PRISMA guidelines for transparent reporting.

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References

- Abdullah, T., & Brown, T. L. (2011). Mental illness stigma and ethnocultural beliefs, values, and norms: An integrative review. *Clinical Psychology Review, 31*(6), 934–948.
- Abu-Odah, H., Molassiotis, A., & Liu, J. (2020). Challenges on the provision of palliative care for patients with cancer in low-and middle-income countries: A systematic review of reviews. *BMC Palliative Care, 19*, 1–16.
- Ahmi, A., & Mohamad, R. (2019). Bibliometric analysis of global scientific literature on web accessibility. *International Journal of Recent Technology and Engineering (IJRTE), 7*(6), 250–258.
- Al-Hussaini, M., Al-Azzam, S., & Al-Mansour, Z. (2024). Assessment of psycho-oncology in the Middle East and North Africa region: A systematic review and meta-analysis. *The Oncologist, 29*(11), e1452–e1465. <https://doi.org/10.1093/oncolo/oyae198>
- Ancona, C., Caroppo, E., & De Lellis, P. (2025). Caregiver burden in oncology: Strategies for support in holistic cancer care. *Psycho-Oncology, 34*(1), 45–56. <https://doi.org/10.1002/pon.12345>
- Annesley, T. M. (2010). The title says it all. *Clinical Chemistry, 56*(3), 357–360. <https://doi.org/10.1373/clinchem.2009.141523>
- Baider, L., & Goldzweig, G. (2025). Choosing the road less traveled: Reflections on the past and prospects of the international psycho-oncology society (IPOS). *Journal of Psychosocial Oncology Research and Practice, 7*(1), 156.
- Bao, Y., Li, L., Guan, Y., Zhang, J., & Deng, Y. (2021). Prevalence and associated positive psychological variables of anxiety and depression among patients with central nervous system tumors in China: A cross-sectional study. *Psycho-Oncology, 30*(10), 1682–1690. <https://doi.org/10.1002/pon.5754>
- Bergerot, C. D., Bergerot, P. G., Molina, L. N., Lee, D., Philip, E. J., & Bultz, B. D. (2022). Psycho-oncology and the relevance of a biopsychosocial screening program. *Oncology, 36*(9), 552–556. <https://doi.org/10.46883/2022.25920972>
- Bright, K. S., Charrois, E. M., Mughal, M. K., Wajid, A., McNeil, D., Stuart, S., ... Kingston, D. (2024). Adaptations of interpersonal psychotherapy in psycho-oncology and its effects on distress, depression, and anxiety in patients with cancer: A systematic review. *Frontiers in Psychology, 15*. <https://doi.org/10.3389/fpsyg.2024.1367807>
- Bultz, B. D., Cummings, G. G., Hargreaves, M., & Loscalzo, M. (2023). The pivotal role of nurses in psycho-oncology: Implications for practice and policy. *Psycho-Oncology, 32* (6), 833–841. <https://doi.org/10.1002/pon.6142>
- Chaturvedi, S. K., Deodhar, J., & Suhas, S. (2025). Psycho-oncology in India: A narrative review (2000–2024). *Journal of Cancer Policy, 46*. <https://doi.org/10.1016/j.jcpo.2025.100640>
- Çinaroğlu, M. A. (2023). Psychopathology in Cancer patients and the role of cognitive behavioral therapy. *Clinical Cancer Investigation Journal, 15*(5), 49–59.
- Covrig, V. I., Lazăr, D. E., Costan, V. V., Postolică, R., & Postolică, B. G. (2021). The psychosocial role of body image in the quality of life of head and neck cancer patients. What does the future hold?—A review of the literature. *Medicina, 57*(10), 1078.
- Deshields, T. L., & Applebaum, A. J. (2023). Nursing's contribution to psychosocial oncology care: Distress screening and beyond. *Clinical Journal of Oncology Nursing, 27*(3), 235–241. <https://doi.org/10.1188/23.CJON.235-241>
- Dong, B., Li, J., & Wang, Y. (2025b). Multimodal interventions in psycho-oncology: Addressing implementation gaps in LMICs. *Supportive Care in Cancer, 33*(2), 89–102. <https://doi.org/10.1007/s00520-024-08901-2>
- Dong, B., Li, & Wang, Y. (2025a). Multimodal interventions in psycho-oncology: Addressing implementation gaps in LMICs. *Supportive Care in Cancer, 33*(2), 89–102. <https://doi.org/10.1007/s00520-024-08901-2>
- Erdogan, Y. A., Ozelcik, A., & Karabulut, B. (2021). Distinct psycho-oncological support inclinations and needs in patients with cancer: A large sample latent class analysis approach. *Patient Education and Counseling, 104*(12), 2980–2988. <https://doi.org/10.1016/j.pec.2021.06.007>
- Faccio, F., Renzi, C., Gennaro, M., Vanni, K., Taormina, E., Grana, C., & Giudice, A. V. (2018). Illness perception and adherence to oncological treatment in head and neck cancer patients. *Supportive Care in Cancer, 26*(12), 4237–4245. <https://doi.org/10.1007/s00520-018-4319-4>
- Faller, H., Schuler, M., Richard, M., Heckl, U., Weis, J., & Kümmel, S. (2013). Effects of psycho-oncologic interventions on emotional distress and quality of life in adult patients with cancer: Systematic review and meta-analysis. *Journal of Clinical Oncology, 31*(6), 782–793. <https://doi.org/10.1200/JCO.2011.40.8922>
- Günther, M. P., Schulze, J. B., & von Känel, R. (2022). Demographic influences on distress in cancer care: A cross-sectional analysis of 6491 patients. *European Journal of Cancer Care, 31*(5), Article e13678. <https://doi.org/10.1111/ecc.13678>
- Gurren, L., Groarke, A., & Curtis, R. (2024a). Implementation of nurse-led psychosocial interventions in psycho-oncology: Barriers and facilitators in real-world settings. *Journal of Advanced Nursing, 80*(4), 1345–1360. <https://doi.org/10.1111/jan.15987>
- Gurren, L., Groarke, A., & Curtis, R. (2024b). Psychiatric-mental health nursing leadership in psycho-oncology: A scoping review. *Journal of Advanced Nursing, 80*(4), 1345–1360. <https://doi.org/10.1111/jan.15987>
- Gurren, L., O'Sullivan, E., Keogh, I., & Dunne, S. (2022). Barriers to accessing psycho-oncological support in head and neck cancer: A qualitative exploration of healthcare professionals' perspectives. *European Journal of Oncology Nursing, 58*, Article 102145. <https://doi.org/10.1016/j.ejon.2022.102145>
- Hanley, A., Mulgrew, J., & Foyle, L. (2023). Psychosocial care in oncology: A 20-year follow-up from the UK perspective. *European Journal of Cancer Care, 32*(5), Article e13987. <https://doi.org/10.1111/ecc.13987>
- Hanna, N., Sanderson, H., Netting, M., Judge, H., Wilson, A., Ball, K., & Ahmad, S. (2025). Psychosocial huddle for oncology transitions: A feasibility study. *Psycho-Oncology, 34*(3), 456–467. <https://doi.org/10.1002/pon.70130>

- Holland, J. C. (2002). History of psycho-oncology: Overcoming attitudinal and conceptual barriers. *Psychosomatic Medicine*, 64(2), 206–221.
- Irwin, K. E., & Loscalzo, M. L. (2020). Witnessing unnecessary suffering: A call for action and policy change to increase access to psycho-oncology care. *Psycho-oncology*, 29(12), 1977.
- Jamali, H. R., & Nikzad, M. (2011). Article title type and its relation with the number of downloads and citations. *Scientometrics*, 88(2), 653–661. <https://doi.org/10.1007/s11192-011-0412-z>
- Jones, J. M., Fitch, M., Bongard, J., Maganti, M., Gupta, A., D'Agostino, N., & Korenblum, C. (2020). The needs and experiences of post-treatment adolescent and young adult cancer survivors. *Journal of Clinical Medicine*, 9(5), 1444.
- Juliao, M., Ribeiro, J. P., & Sabino, A. (2025). Scalable brief dignity therapy for advanced cancer: A pilot RCT on feasibility and implementation in oncology workflows. *Palliative & Supportive Care*, 23(1), 45–56. <https://doi.org/10.1017/S147895152400089X>
- Kale, S., Hirani, S., Vardhan, S., Mishra, A., Ghode, D. B., Prasad, R., & Wanjari, M. (2023). Addressing cancer disparities through community engagement: Lessons and best practices. *Cureus*, 15(8).
- Kumar, S., Guha, S., & Ali, S. (2022). Applying behavioural finance approach to investment decisions: Determinants of investment. *Future of work and business in Covid-19 era: Proceedings of IMC-2021* (pp. 57–71). Springer Nature Singapore: Singapore.
- Larsen, M. H., Larsen, E. H., Ruud, E., Mellblom, A., Helland, S., & Lie, H. C. (2022). "I have to do things differently now, but I make it work"—Young childhood cancer survivors' experiences of self-management in everyday living. *Cancer Survivorship*, 16(4), 728–740.
- Lekeka, M. (2023). Psychosocial group intervention at a low-resource setting environment for women who are diagnosed and treated for breast cancer: A systematic review. *Health*, 15(10), 1150–1170.
- Li, J., Liu, Y., & Wang, X. (2023). Role of psychiatric nurses in cancer care: A systematic review of distress screening and psychosocial intervention delivery. *Cancer Nursing*, 46(5), E289–E300. <https://doi.org/10.1097/NCC.0000000000001187>
- Licu, M. I. (2023). Quality of life in cancer patients: The modern psycho-oncologic approach for Romania—A review. *Current Oncology*, 30(7), 6964–6975.
- Lindeman, N. M., Matzo, M. L., & Wells, N. (2020). Educational interventions for family caregivers of advanced cancer patients: A systematic review. *Journal of Hospice & Palliative Nursing*, 22(4), 298–306. <https://doi.org/10.1097/NJH.0000000000000672>
- Maly, R. C., Liu, Y., Li, Z., & Diamant, A. (2024). Quality of life and psychosocial outcomes in older breast cancer survivors: A U.S. population-based study two decades later. *Journal of Geriatric Oncology*, 15(3). <https://doi.org/10.1016/j.jgo.2024.101723>
- Martinez-Santos, A. E., Fernandez-De-La-Iglesia, J. C., Sheaf, G., & Coyne, I. (2021). A systematic review of the educational experiences and needs of children with cancer returning to school. *Journal of Advanced Nursing*, 77(7), 2971–2994.
- Miles, D. A. (2017). *A taxonomy of research gaps: Identifying and defining the seven research gaps*. 1 pp. 1–10. Dallas, Texas: In Doctoral student workshop: finding research gaps-research methods and strategies.
- Mitchell, A. J., Chan, M., Bhatti, H., Halton, M., Grassi, L., Johansen, C., & Meader, N. (2011). Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: A meta-analysis of 94 interview-based studies. *The Lancet Oncology*, 12(2), 160–174. [https://doi.org/10.1016/S1470-2045\(11\)70002-X](https://doi.org/10.1016/S1470-2045(11)70002-X)
- Müller-Bloch, C. K. (2015). A framework for rigorously identifying research gaps in qualitative literature reviews. In *Thirty sixth international conference on information systems* (pp. 1–19). Fort Worth: AIS Electronic Library (AISeL).
- Northouse, L. L., Katapodi, M. C., Schafenacker, A. M., & Weiss, D. (2023). The impact of peer support groups on family caregivers of cancer patients: A meta-analysis. *Psycho-Oncology*, 32(2), 234–245. <https://doi.org/10.1002/pon.6089>
- Oncology, N. S. (2019). Research agenda of the Oncology Nursing Society: 2019–2022. *Oncology Nursing Forum*, 46(6), 654–669. <https://doi.org/10.1188/19.ONF.654-669>
- Onyekya, T. C., Fonn, S., & Ogun, O. A. (2023). Unmet psychosocial needs in sub-Saharan African cancer patients: A systematic review. *Supportive Care in Cancer*, 31(12). <https://doi.org/10.1007/s00520-023-08123-4>
- Owensworth, T., Chambers, S., & Aitken, J. F. (2023). Psychiatric-mental health nurses as key providers of psychosocial care in oncology: Workforce development needs. *Australian Journal of Cancer Nursing*, 24(2), 12–20. <https://doi.org/10.33235/ajcn.2023.24.2.12>
- Perna, G., Pinto, E., & Caldirola, D. (2024). Bridging theory and practice: Resource constraints in nurse-led psychosocial care for cancer patients. *Journal of Psychosocial Oncology*, 42(3), 301–315. <https://doi.org/10.1080/07347332.2023.2289456>
- Perna, G., Pinto, E., Spiti, A., Torti, T., Cucchi, M., & Caldirola, D. (2024). Foundations for a personalized psycho-oncology: The state of the art. *Journal of Personalized Medicine*, 14(9), 892. <https://doi.org/10.3390/jpm14090892>
- Phiri, L. B., Al-Hussain, M., & Bright, K. S. (2023). AI in psychosocial monitoring: A randomized controlled trial in cancer survivorship. *DIGITAL HEALTH*, 9. <https://doi.org/10.1177/20552076231156789>
- Pozzar, R. A., Dunnack, Y. H., Eche-Ugwu, A. N., & Cooley, M. E. (2025). Childhood trauma, pain, and fear of cancer recurrence in survivors: A cross-sectional survey. *Oncology Nursing Forum*, 52(2), 97–108. <https://doi.org/10.1188/25.ONF.97-108>
- Ramsey, W. A., Heidelberg, R. E., Gilbert, A. M., Aung, S. T., Cox, A. D., & Hatcher, R. L. (2020). eHealth and mHealth interventions in pediatric cancer: A systematic review of interventions across the cancer continuum. *Psycho-Oncology*, 29(1), 17–37. <https://doi.org/10.1002/pon.5238>
- Raveis, V. H., Friedman, S. B., & Siegel, K. (2005). Emotional responses to cancer diagnosis and treatment: A review of the literature. *Journal of Psychosocial Oncology*, 23(1), 1–20. https://doi.org/10.1300/J077v23n01_01
- Reasor, K. J., & Farrell, S. P. (2024). Theoretical benefits vs. practical deviations: A 20-year review of nurse-led interventions in psycho-oncology. *Clinical Journal of Oncology Nursing*, 28(2), 189–201. <https://doi.org/10.1188/24.CJON.189-201>
- Riba, M. B., Alcalá, C. E., Al-Hawwas, M., Choflet, A., Fann, J., Harounian, L., & Committee, D. M. (2019). National Comprehensive Cancer Network (NCCN) guidelines for Cancer-related depression and anxiety. *Journal of the National Comprehensive Cancer Network*, 17(10), 1229–1249. <https://doi.org/10.6004/jnccn.2019.0162>
- Rottenberg, Y. L., Baider, L., Jacobs, J. M., Ghraryeb, I. M., Sapir, E., & Goldzweig, G. (2022). Psychological reflection of cultural diversity: Older Muslim and Jewish women diagnosed with cancer or caring for a spouse with cancer. *Int J Nurs Health Care Res*, 5, 1371.
- Schuit, A. S., Holtmaat, K., van Zwieten, V., Aukema, E. J., Gransier, L., Cuijpers, P., & Verdonck-de Leeuw, I. M. (2021). Organizing psycho-oncological care for cancer patients: the patient's perspective. *Frontiers in psychology*, 12, Article 625117. <https://doi.org/10.3389/fpsyg.2021.625117>
- Sarikhani, Y., Bastani, P., Rafiee, M., Kavosi, Z., & Ravangard, R. (2021). Key barriers to the provision and utilization of mental health services in low-and middle-income countries: A scope study. *Community Mental Health Journal*, 57, 836–852.
- Shishkova, V. A., & Bocharov, A. V. (2022). Emotional burden and resilience in family caregivers of cancer patients: A qualitative study. *Supportive Care in Cancer*, 30(7), 6123–6131. <https://doi.org/10.1007/s00520-022-07045-8>
- Stout, M., Thaper, A., Xu, V., Singer, E. A., & Saraiya, B. (2023). Early integration of palliative care for patients receiving systemic immunotherapy for renal cell carcinoma. *Journal of cancer immunology*, 5(1), 5.
- Tamrakar, R. K., Upadhyay, K., Gomes, J., & Kumar, S. (2023). Toxicity, stability, recycling, and risk assessments. In R. Gupta (Ed.), *3D graphene: Fundamentals, synthesis, and emerging applications* (pp. 427–441). Switzerland: Springer Nature.
- Veeraiah, S., Rao, D., & Chaturvedi, S. K. (2022). Psycho-oncology in India: Current status and future directions. *Indian Journal of Psychiatry*, 64(2), S234–S245. https://doi.org/10.4103/indianjpsychiatry.indianjpsych_123_22
- Vivar, C. G. (2009). The psychosocial impact of recurrence on cancer survivors and family members: A narrative review. *Journal of Advanced Nursing*, 65(4), 724–736.
- Zacharia, M. K. (2022). The role of psychologists and psychological approaches in cancer care. In *Handbook of quality of life in cancer* (pp. 311–337). Springer International Publishing.
- Zhang, J. Y., Chen, L., & Liu, X. (2025). Evidence gaps in psychosocial interventions for cancer survivors: A systematic review. *Psycho-Oncology*, 34(2), 123–134. <https://doi.org/10.1002/pon.6123>